A TECHNIQUE FOR ORIENTING BEETLE GENITALIA FOR ILLUSTRATION

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One of the most difficult aspects of studying beetle genitalia has been orientation under the microscope for drawings. This can sometimes be done in alcohol by sticking them into plasticine or wax for the very largest beetles but this method is utterly impractical for the large number of small species. One of the standard methods is to mount the genitalia of the latter in balsam or glycerin and arrange them with fine needles thrust under the cover glass.

The author has successfully employed a modification of this technique that should be useful for any small dissections. Two square cover glasses are cemented to a microscope slide about 1/4 inch apart. The genitalia, either fresh from KOH or from the small genitalia tubes that many coleopterists use, are placed in the gap between the cover glasses and a drop of glycerin added. A cover glass is placed over this, preferably a small round one. To orient the specimen, one needs only to move around the cover glass to roll it over. If it is watched under the microscope while this operation is taking place, the desired position can be gained. If the entire area under the slip is full of glycerin, the specimen will remain in position for a number of hours and can even be left overnight without great alteration. When a second view is desired, a couple of minutes of manipulation will suffice to make the change. When finished with the specimen, it can be removed by lifting the cover glass with forceps and picking it off with the point of an insect pin and transferring it back to its vial.